

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A method of amplifying RNA sequences comprising:

- a) reverse transcribing of RNA to form ~~cDNA~~ a cDNA:RNA duplex;
- b) self-ligating said cDNA, without first removing said RNA from said duplex, to form circular cDNA products; and
- c) amplifying the ligated cDNA products by rolling circle amplification using nuclease resistant random-sequence primers and DNA polymerase.

Claim 2 (original): The method of claim 1, wherein the DNA polymerase has strand displacement activity.

Claim 3 (original): The method of claim 1, wherein the DNA polymerase is selected from the group consisting of *Thermoanaerobacter thermohydrosulfuricus* DNA polymerase, *Thermococcus litoralis* DNA polymerase I, *E. coli* DNA polymerase I, *Taq* DNA polymerase I, *Tth* DNA polymerase I, *Bacillus stearothermophilus* (*Bst*) DNA polymerase I, *E. coli* DNA polymerase III, bacteriophage T5 DNA polymerase,

bacteriophage M2 DNA polymerase, bacteriophage T4 DNA polymerase, bacteriophage T7 DNA polymerase, bacteriophage phi29 DNA polymerase, bacteriophage PRD1 DNA polymerase, bacteriophage phi15 DNA polymerase, bacteriophage phi21 DNA polymerase, bacteriophage PZE DNA polymerase, bacteriophage PZA DNA polymerase, bacteriophage Nf DNA polymerase, bacteriophage M2Y DNA polymerase, bacteriophage B103 DNA polymerase, bacteriophage SF5 DNA polymerase, bacteriophage GA-1 DNA polymerase, bacteriophage Cp-5 DNA polymerase, bacteriophage Cp-7 DNA polymerase, bacteriophage PR4 DNA polymerase, bacteriophage PR5 DNA polymerase, bacteriophage PR722 DNA polymerase and bacteriophage L17 DNA polymerase.

Claims 4-5 (cancelled)

Claim 6 (currently amended): ~~A- The method of claim 1, wherein said amplifying RNA sequences comprising:~~

- a) ~~reverse transcribing of RNA to form cDNA step is performed~~ using a second primer that comprises the sequence of an RNA polymerase promoter; which method further comprises:
- b) ~~self ligating said cDNA to form circular cDNA products;~~
- e) ~~amplifying the resulting ligated cDNA by rolling circle amplification using random sequence primers and DNA polymerase; and~~

- d) transcribing the resulting amplified, promoter-containing DNA using RNA polymerase.

Claim 7 (cancelled)

Claim 8 (original): The method of claim 6, wherein the RNA polymerase is T7 RNA polymerase, T3 RNA polymerase or SP6 RNA polymerase.

Claims 9-11 (cancelled)

Claim 12 (currently amended): The method of claim 6, wherein said second primer further comprises a restriction enzyme recognition sequence and wherein the amplified, promoter containing DNA is treated with a restriction enzyme prior to transcribing.

Claim 13 (currently amended): The method of claim 6, wherein said second primer comprises an RNA polymerase termination sequence.

Claim 14 (currently amended): A method of amplifying RNA sequences comprising:

- a) reverse transcribing RNA to form ~~cDNA~~ a cDNA:RNA duplex;
- b) self-ligating the cDNA, without first removing said RNA from said duplex, to form circular cDNA products; and

- c) amplifying the resulting self-ligated cDNA by rolling circle amplification using one or more nuclease resistant specific sequence primers.

Claim 15 (original): The method of claim 14, wherein 1 to 50 said specific sequence primers are used.

Claim 16 (original): The method of claim 14, wherein said one or more specific sequence primers are each independently between 7 and 50 nucleotides long.

Claim 17 (original): The method of claim 16, wherein said one or more specific sequence primers are each independently between 12 and 25 nucleotides long.

Claim 18 (previously presented): The method of claim 14, wherein the DNA polymerase has strand displacement activity.

Claim 19 (previously presented): The method of claim 14, wherein the DNA polymerase is selected from the group consisting of *Thermoanaerobacter thermohydrosulfuricus* DNA polymerase, *Thermococcus litoralis* DNA polymerase I, *E. coli* DNA polymerase I, *Taq* DNA polymerase I, *Tth* DNA polymerase I, *Bacillus stearothermophilus* (*Bst*) DNA polymerase I, *E. coli* DNA polymerase III, bacteriophage T5 DNA polymerase, bacteriophage M2 DNA polymerase, bacteriophage T4 DNA polymerase, bacteriophage

T7 DNA polymerase, bacteriophage phi29 DNA polymerase, bacteriophage PRD1 DNA polymerase, bacteriophage phi15 DNA polymerase, bacteriophage phi21 DNA polymerase, bacteriophage PZE DNA polymerase, bacteriophage PZA DNA polymerase, bacteriophage Nf DNA polymerase, bacteriophage M2Y DNA polymerase, bacteriophage B103 DNA polymerase, bacteriophage SF5 DNA polymerase, bacteriophage GA-1 DNA polymerase, bacteriophage Cp-5 DNA polymerase, bacteriophage Cp-7 DNA polymerase, bacteriophage PR4 DNA polymerase, bacteriophage PR5 DNA polymerase, bacteriophage PR722 DNA polymerase and bacteriophage L17 DNA polymerase.

Claims 20-21 (cancelled)

Claim 22 (original): A method of producing labeled DNA comprising, amplifying DNA according to the method of claim 1 or 14, wherein said amplifying step further comprises including one or more detectably labeled nucleotide analogs or one or more nucleotide analogs providing a means for direct or indirect attachment of a detection label.

Claims 23-24 (cancelled)

Claim 25 (original): A method of producing labeled RNA comprising, amplifying RNA according to the method of claim 6, wherein said transcribing step d), further comprises

including one or more detectably labeled nucleotide analogs or one or more nucleotide analogs providing a means for direct or indirect attachment of a detection label.

Claims 26-27 (cancelled)

Claim 28 (previously presented): A method of identifying an RNA sequence comprising, amplifying RNA according to the method of any one of claims 1, 6 or 14, and identifying the resulting amplified RNA by a sequence dependent detection method.

Claims 29-30 (cancelled)

Claim 31 (new): A method of amplifying RNA sequences comprising:

- a) reverse transcribing of RNA to form cDNA;
- b) converting said cDNA into double-stranded, blunt-ended cDNA;
- c) self-ligating said double-stranded, blunt-ended cDNA to form circular cDNA products; and
- d) amplifying the circular cDNA products by rolling circle amplification using nuclease resistant random-sequence primers and DNA polymerase.

Claim 32 (new): The method of claim 31 wherein said reverse transcribing step is performed using a second primer that comprises the sequence of an RNA polymerase promoter, which method further comprises:

- e) transcribing the resulting amplified, promoter-containing DNA using RNA polymerase.

Claim 33 (new): The method of claim 32, wherein the RNA polymerase is T7 RNA polymerase, T3 RNA polymerase or SP6 RNA polymerase.

Claim 34 (new): The method of claim 32, wherein said second primer further comprises a restriction enzyme recognition sequence and wherein the amplified, promoter containing DNA is treated with a restriction enzyme prior to transcribing.

Claim 35 (new): The method of claim 33, wherein said second primer comprises an RNA polymerase termination sequence.

Claim 36 (new): A method of amplifying RNA sequences comprising:

- a) reverse transcribing RNA to form cDNA;
- b) converting said cDNA into double-stranded, blunt-ended cDNA;
- b) self-ligating the double-stranded, blunt-ended cDNA to form circular cDNA products; and

- c) amplifying the resulting self-ligated cDNA by rolling circle amplification using one or more nuclease resistant specific sequence primers.